

***ELPH seminar***

**講師：** Professor Michael Kohl (Hampton University)

**日時：** 2019年3月8日 (金) 15:00 ~ 16:30

**場所：** 電子光理学研究センター三神峯ホール

**題目：** Anomalies in proton observables  
- old physics or new physics?

**[講演要旨]**

The proton has been subject of several puzzles in recent decades. Following the proton spin puzzle, anomalies in measurements of the proton elastic form factors and of the proton charge radius have given rise to speculations about missing elements of old or new physics, such as two-photon exchange or the postulation of new particles still to be discovered, which could also be linked to dark matter.

A framework of new experiments aims to resolve these puzzles by stringently testing the offered hypotheses. I will discuss aspects of the OLYMPUS, MUSE, TREK and DarkLight experiments and show how they are intertwined.

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